THE FOURTH

ANNUAL REPORT

TO THE

BEDLINGTONSHIRE

URBAN

District Council,

FOR THE YEAR 1904,

BY

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Medical Officer of Health.

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1905.

To the Chairman and Members

of the

Bedlingtonshire Urban District Council.

Mr. Chairman and Gentlemen,

I beg to submit my Fourth Annual Report on the Health and Sanitary condition of your district for the year 1904.

ESTIMATED POPULATION.

To obtain the exact number of the inhabitants of the district is no easy matter with a decennial census, and all estimates of population are merely such. Taking the number of inhabited houses in the district and working at the average of 5 persons per house, which has remained nearly a constant factor for the last 40 years, the population would be 21485. On the other hand by taking the population at the last census and adding the excess of births over deaths in the district from that period to midyear 1904, the figures work out at 20013; this of course does not quite allow for any excess of incomers over outgoers, which is difficult to estimate, although probably those leaving the district would not amount to so many as those coming into it.

To be able to arrive at more exact figures in estimating a population it is necessary that the census should be taken every 5 instead of every 10 years. As there is a greater probability of less error with a quinquennial enumeration and consequently a greater certainty of our death rates and birth rates being more accurate, I trust that the Council will give their support to the movement at present going on in Public Health Circles to get the authorities to take a census every 5 instead of every 10 years as at present.

As I do not wish to overestimate the population and so artifically reduce the death rate, I take it to midyear as 20000, which is most probably under rather than over the actual figure.

BIRTH RATE.

There were 729 births registered during the year, 367 boys and 362 girls, which is a decrease of 6 compared with last year. The highest number of births was registered in January, viz. 78, and the lowest number (45) in August. During the first 6 months of the year the numbers were :—males, 192; females, 170; total 362, and in the second half-year 175 boys and 192 girls = 367.

The number of illegitimate births registered during the 12 months was 30, the same as last year; of these 13 were males and 17 females.

On the estimated population the birth rate for the year is 36 per 1000. The illegitimate rate compared to the total number of births is 4·29.

DEATH RATE.

During the year 367 deaths were registered—7 less than last year—of which 191 were males and 176 females. The highest number of deaths occurred in March, viz. 41, and the lowest in November, viz. 16.

On the estimated population the death rate for the year is 18. During the first 6 months of the year 110 males and 90 females died, making a total of 200, while for the second 6 months the figures were : males, 81; females, 86 = 167. The total number of deaths of illegitimate children was 16, equal to more than half the illegitimate children born.

Infantile Mortality.—During the year 132 Infants under 1 year of age died, making the Infantile Mortality rate per 1000 births registered 181 as against 172 last year. If to these deaths be added 57 deaths of children between the ages of 1 and 5 years we get a total of 189 deaths under 5 years of age, which is equivelant to a death rate of 9·4 or rather over 50 per cent. of the total death rate.

There were 10 deaths from Accident, 22 from Prematurity of Birth, and 1 Suicide. By eliminating these deaths the ordinary disease death rate for the district becomes 16·7.

HOUSING.

Notwithstanding the fact that certificates of occupation have been given for 137 new houses during the year there still is a comparitive scarcity of houses in the district. Plans have been passed for more houses, many of which are now in course of erection. 4297 houses are in occupation in the district, being an increase of 534 houses occupied since the census of 1901. In the new Building Regulations approved by the council, I am glad to see that builders may now erect houses with cavity walls provided the walls are properly tied. I believe that this concession to the builders will further stimulate building operations in the district and will tend to the erection of a dryer type of house.

SEWERAGE AND DRAINAGE.

Considerable progress is still being made in improving the sewerage of the district and further improvements are under consideration.

A new 12-in. sewer has been laid in Sleekburn Road.
„ 9-in. „ „ „ in Back Clayton Street, Sleekburn.
„ 9-in. „ „ „ beside Foresters' Arms, West Sleekburn.

A considerable number of new sewers have been laid down in connection with new blocks of houses which have been built and more are in course of construction.

The new sewage scheme mentioned in my last annual report is now under consideration by the Local Government Board.

SCAVENGING.

The remarks made on this question in last year's report are still applicable. On the whole I believe the scavenging to have been better attended to this year than in previous years.

WATER SUPPLY OF THE DISTRICT.

We have not as in neighbouring districts suffered from shortage of supply during the year. The service has been considerably improved in the Sleekburn and Netherton districts by the laying of the new mains.

A new main has also been laid to the New Isolation Hospital, and houses which were previously not supplied with water from the public service are now supplied from this source.

A considerable number of private services have been put in in various parts of the district during the year.

More water closets are now being built than in former years.

The difficulty arising from the Newcastle & Gateshead Co.'s water bill has been satisfactorily settled for the Council by the Committee appointed to deal with the matter.

Samples of water were submitted to the Analysts during the year for examination. The following is a copy of the reports :—

Bacteriological Laboratory,
College of Medicine, Newcastle.
11/7/04.

Report on 3 samples of water submitted by Dr. R. S. Trotter for Bacteriological examination.

The 3 samples labelled 1, 2, and 3 were received at the Bacteriological Laboratory at 3·45 p.m. on Friday, July 8th, 1904. 1 c.c. and ½ c.c. (as a control) were used from each sample. Gelatine plates were poured and incubated for 3 days at 22 c. On counting the colonies the following results were obtained.

	No. of Bacteria liquifying Gelatine.	No. of Bacteria not liq. Gelatine.	Total.
Sample 1	7	41	48
Sample 2	6	48	54
Sample 3	54	149	203

Remarks :—

Samples 1 and 2 both being under 100 are distinctly good. Sample 3 as compared with the Newcastle water is quite satisfactary, being only just over 200. Compared with samples 1 and 2 it is not so satisfactory. None of the samples gave any foul odour on incubation. On the whole the water appears very good for drinking purposes.

REGINALD BIGG, M.B. B.S., D.P., H.

Public Analyst's Laboratory,
75 Side, Newcastle-on-Tyne,
July 12th, 1904.

We hereby certify that we have analysed the undermentioned samples of water and that we find the following results expressed in grains per gallon :—Samples marked respectively "No. 1" and "No. 2."

	No. 1	No. 2.
Total solid matters in solution dried at 212° Fah.	21·300	22·300
Chlorine existing as chlorides	1·274	1·335
Ammonia	0·002	0·002
Albuminoid Ammonia	0 010	0 008
Nitrogen existing as nitrates	0·030	0·033
Oxygen absorbed in four hours at 80° Fah.	0·116	0·116
Lead and other poisonous metals	None	None
Appearance in two foot tube	Faint yellow colour and clear	Faint yellow colour and clear
Smell whsn heated to 100° Fah.	None	None
Microscopical examination of sediment	Satisfactory.	Satisfactory

These waters are in our opinion suitable for drinking and general domestic use.

J. & H. S. PATTINSON.

SANITARY WORK GENERALLY.

Systematic inspection of the district as a whole is made at least once a month ; many parts are inspected weekly ; specific complaints are dealt with as they arise.

The Surveyor and I as a general rule consult in the morning as to what has to be attended to during the day and arrange how the work is to be done, e.g. whether it is more advisable in the public interest to take joint or separate action, what notices should be sent out, what pressure can be brought to bear by moral suasion and so on in order to save the Council the necessity of taking legal action whenever possible. The result of this method of working during the year has been that we have without fuss got a considerable number of minor sanitary improvements carried out, work that item by item may not show much, but which in the aggregate will probably have a beneficial effect on the public health.

The appointment of a sub-inspector in this department has considerably facilitated the arrangement of work, and as he becomes more acquainted with the complex duties devolving upon him he will prove of valuable assistance both to the Surveyor and to myself.

NUISANCES DEALT WITH.

A considerable number of nuisances have been dealt with during the year. Notices in the cases dealt with have been sent to the parties concerned and the recommendations of the Surveyor have been carried out.

Many kinds of nuisances have been abated.

The principal improvements which have been made in accordance with the recommendations of the Sanitary Inspector have been where old drains composed of ordinary field pipes have been discovered they have been taken up and new drains made of sanitary pipes laid in their place.

In one instance it was found necessary to lay a new drain of metal pipes ; in this case also a new w.c. and urinal were built and the yard which previously was unpaved was cemented out.

In cases where drains have been found to go under the floors of houses they have been taken up and the drains brought round the houses except in two instances where this was found to be impracticable ; in these cases a metal drain pipe has been laid under the houses.

New ashpits and privies have been built in several places where they were needed and a considerable number of old ashpits repaired and put into a better sanitary condition.

In several places where untrapped gullies were found new and properly trapped ones have been substituted for them.

The nuisances arising from overfilled ashpits have been carefully dealt with this year. Nuisances of this nature are continously cropping up, but we hope each year by careful attention to these matters to improve the condition of affairs. In dealing with ashpits I wish again to remind the public that they can assist the Surveyor greatly by bringing their complaints to his notice in a proper manner.

If they will carefully carry out the following directions things which may otherwise escape attention will be more readily found out:—

Every householder should keep a calendar and note on it the date on which his ashpit is cleaned out; if it is not cleaned out one month from that date and is full, or if it is full before the usual time for cleaning out comes round, let him send at once a written complaint addressed to the Sanitary Inspector, Bedlington. Similarly any other nuisance coming under the notice of a ratepayer should either be notified in writing to the Sanitary Inspector or the Medical Officer of Health at Bedlington. All notices or complaints should be authenticated by the person complaining in order that the officials of the Council may know that the complaints are genuine. No attention as a general rule is paid to anonymous communications.

NOTIFIABLE DISEASES.

During the year 185 cases of Infectious Diseases were notified, made up of Scarlet Fever 109, Smallpox 30, Enteric Fever 22, Erysipelas 19, Diphtheria 3, Continued Fever 1, and Puerperal Fever 1 case. Last year the total number of cases notified was 490, made up of Scarlet Fever 394, Smallpox 38, Erysidelas 22, Enteric Fever 21, Diphtheria 7, Membranous Croup 2, Continued Fever 3, and Puerperal Fever 3 cases.

Deaths.—There were 4 deaths from Smallpox, 4 from Enteric Fever, 1 from Diphtheria, 1 from Erysipelas and 1 from Scarlet Fever.

Total Cases of and Deaths from Infectious Disease notified in each locality during the year 1904:—

	Total.	Barrington.	Bedlington.	Cambois.	Choppington.	Netherton.	Sleekburn.	E. & W. Sleekburn.
Smallpox	30	0	17 (4 dths)	0	1	10	2	0
Diphtheria	3	0	0	2	2 (1 death)	0	0	1
Erysipelas	19	1	5	6 (1 dth)	5	0	2	0
Scarlet Fever	109	17	22	33	24 (1 death)	0	9	4
Enteric Fever	22	3	2	6 (2 dths)	8 (2 deaths)	0	1	2
Continued Fever	1	0	0	1	0	0	0	0
Puerperal Fever	1	0	0	0	0	1	0	0
Total	185	21	46	46	40	11	14	7

SCARLET FEVER.

From the above table it will be seen that Scarlet Fever occurred in all parts of the district with the exception of that of Netherton.

What I said concerning Scarlet Fever in my last 2 annual reports may be said with equal truth this year. I would this year like to draw the attention of the Council to an anomaly in the Public Health Acts, which in our district applies more particularly to Scarlet Fever. The Public Health Acts specially forbid the exposure of a patient suffering from Scarlet Fever in any street, public place, shop, inn, or in a public conveyance, and imposes penalties on the person so exposing the patient; they do not state however whether the house or room in the house in which the patient is, and which can be and in this as in many other districts is visited by playmates and friends, and which frequently becomes a common playroom for the children from adjoining houses and a gossip room for the neighbours, can be regarded as a public place, and as far as I am aware no penalty can be enforced: this is a serious defect in the Acts.

Investigations of this nature by mothers and friends of patients are not in the interest of the public health, and the State ought to empower Local Sanitary Authorities to impose penalties to prevent this indiscriminate visiting.

Most Sanitarians are of opinion that infection is more active in a close stuffy confined room such as patients are frequently confined in here and where they are visited under the circumstances mentioned than in an open street or place. There is no doubt but that Scarlet Fever is spread by this promiscuous intercourse in our district, and surely it is a serious legislative blunder to permit prosecution for exposure of infected persons and things under one set of circumstances not particularly favourable to the spread of infection and to forbid the imposing of penalties for similar exposure under conditions much more likely to favour the spread of infection.

The great majority of cases of Scarlet Fever were of a comparatively mild type and the mildness of the disease frequently makes the diagnosis difficult, and doubtless some mild cases occur un-noticed and act as a source of infection in the further spread of the disease In regard to this possible source of the spread of infection I beg to suggest to the Education Committee of the Council that they should appoint Medical men (or suggest the appointment to the Central Committee) in the different parts of the district to inspect the scholars in the various schools periodically so that any cases undiscovered at home may in a stage when they are likely to be found and when they are still infective be brought to the notice of the Medical Officer of Health, and so be excluded from

school where they may infect a large number of other children. I make this suggestion primarily as a further means of limiting the spread of the disease, and secondly beecause it is impossible for me as Medical Officer of Health to inspect all the Scholars in all the Schools in the district sufficiently often.

It might further be advisable for the Committee to make an order that the teachers in the different schools notify the Medical Officer of Health if they notice any child in the school whose skin is peeling or who has any suspicious rash or a sore throat. 1 death occurred.

ENTERIC FEVER.

22 cases of Enteric Fever were notified during the year, 4 of which proved fatal. A considerable amount of trouble was taken to ascertain the primary source of infection wherever this disease broke out, but except in cases where more than one case occurred in a particular household or immediately adjacent to it it was impossible to trace the origin definitely. We are thus compelled to consider (and I have gone into the history of the disease in the district as a whole for the past 19 years very carefully) that a considerable number of the cases occurring are of a sporadic nature and are due to the endemic character of the disease. One finds on looking back into the reports of previous years that in certain parts of the district under particular circumstances Typhoid Fever has broken out from time to time. On looking at these outbreaks in all their different bearings one cannot help coming to the conclusion that from a certain combination of insanitary circumstances Enteric Fever given favourable conditions will occur in certain places. In many of these cases one frequently finds defective conditions of drainage, a certain subsoil moisture which percolates into the houses, and a class of people who have not even the most rudimentary notions of cleanliness.

DIPHTHERIA.

3 cases were notified all independent of each other. There was no spread of the disease from any of the sources, one of the cases proved fatal.

ERYSIPELAS.

19 cases were notified and no connection could be traced between any one case and another. As far as our district is concerned taking the history of the disease for the last 25 years there seems to be no particular reason why this disease should be kept on the list of notifiable infectious diseases. From a public health point of view it would be more important if measles were to be made notifiable. 1 death, that of an infant occurred.

CONTINUED FEVER.

1 case occurred at Cambois.

PUERPERAL FEVER.

1 case was reported from Netherton Colliery; it was not fatal and no other cases occurred, very strict precautions being taken to limit the spread of infection.

On the recommendation of the Council the Chairman, Sanitary Inspector, and I drew out a set of instructions to be given to householders and guardians of patients when a case of infectious disease was notified from any house in the district. Since these instructions were printed a copy has been sent to each house where infectious disease has broken out; they have been of some service and I trust as people come to understand what they have to do and the responsibilities that are thrown on them these instructions may gradually become more useful. They are to a certain extent imperfect as it was found impossible to make them applicable to all cases without making them too elobarate for the average householder to take the trouble to understand. Copies have been given to each member of the Council. The control over infectious diseases has been somewhat better exercised this year than hitherto, and I hope next year to be able to report still further progress in this respect as with the help of the Assistant to the Sanitary Inspector and the Caretaker to the New Hospital, we will be free from many of the worries consequent on the employment of odd men in this department. The Council may be assured that no one who has not had the anxiety of the possible idiosyncrasies of such men to deal with can realise what responsibility has been placed on the Officials of the Council.

THE NEW ISOLATION HOSPITAL

Can now be utilised whenever it is needed. There is accommodation for 20 beds and the usual outbuildings are ready with the exception of the Disinfecting Chamber, which still requires a Steam Disinfector before it is completely fitted up. This we hope to have very soon, the Hospital Committee having resolved that one is necessary. I hope the Council will decide shortly on purchasing a new Ambulance Van as the present one is gradually becoming unfit for general use.

SMALLPOX.

At the beginniug of the year there were in Hospital 5 patients still remaining from those admitted in 1903.

On the 7th of January the first case for the year was notified from 8, Pioneer Terrace, Sleekburn. The origin was somewhat obscure but the disease was apparently contracted in Hirst. There was no spread of infection from this source.

The last patient was discharged from Hospital on the 2nd February, the Hospital being clear for the first time since 9th September, 1903.

On the 15th February Smallpox again broke out in the district, on this occasion on the extreme fringe of the Netherton division of the shire at the Wood House near Stannington Station. The disease was apparently brought to the hut by a navvy who had been living there but who had come from Whitehouses above Morpeth.

7 cases were removed from this place to Hospital on the 17th, it having been found impracticable to isolate them in the hut. On the 19th 2 other cases were removed to Hospital from this same house and on the 24th another case. On this latter date a case was discovered in Coach Road, Bedlington, and removed on the same day to Hospital.

As regards this last case the infection was contracted from a brother who was subsequently discovered to be just recovering from Smallpox and who had been kept in the house unknown to us. Whence this last mentioned lad contracted the disease I cannot tell. The parent of this lad was prosecuted and a conviction for concealment of Smallpox got against her. On the 2nd of March 5 cases from the East End of Bedlington were removed to Hospital; on the 8th one; on the 15th five, and on the 27th one. Two more cases were removed to Hospital from the same quarter on the 6th April and also one case from Stakeford. The origin of the last case I was unable to trace. On the 8th of April another case was removed to Hospital from the East End of Bedlington. The last case of the outbreak also occurred in this quarter and was removed to the Hospital on the 2nd of May. This case died on the 10th May and on the 18th of May the Hospital was closed. No more cases occurred till the 31st of August when a case was notified at 10, Pioneer Terrace, Steekburn; it originated from Whitley. This case was admitted to Hospital on the 1st September and discharged on the 30th. There was no spread from this source.

The longest period during which a patient was in Hospital was 52 days and the shortest 3 days. The average length of stay in Hospital per patient was 22½ days.

Distribution of Cases.—Sleekburn: 8, Pioneer Terrace, 1 case; 10, Pioneer Terrace, 1 case; Wood House near Stannington Station, 10 cases; East End, Bedlington, 17 cases; Stakeford, 1 case. 4 deaths occurred.

From this distribution of cases it may be seen that in each instance the outbreak has been limited to the particular part of the district in which it occurred, and in the case of the East End of Bedlington in particular this was very fortunate as the work of supervision involved there was enormous and very responsible. I do not propose in this report to detail the measures taken to limit the outbreak as these measures have been fully discussed in my monthly reports to the Council and in my reports to the Local Government Board.

I may say that the precautions taken to prevent the spread of infection were similar to those taken last year and which are shortly detailed in my annual report for 1903. All cases were of course treated in Hospital. I have to thank Mrs. Scott and the staff of the Hospital for the careful way in which they did their duties and for the extremely kind and judicious manner in which they handled the patients under their charge.

NON-NOTIFIABLE ZYMOTIC DISEASES.

Measles, Whooping Cough, Mumps, Chicken Pox, Influenza, Zymotic Enteritis have all been prevalent at times throughout the year in different parts of the district. Owing to the presence of Smallpox in the district particular attention was paid to any outbreaks of chicken pox and I visited a very considerable number of these cases. The Council is much indebted to the various medical men in the district for their public-spirited action in keeping under careful observation any cases of chicken pox that occurred in their practices and thus saving the Council the necessity of making the disease notifiable.

DEATHS FROM ZYMOTIC DISEASES.

Notifiable.			*Non-Notifiable.*		
Scarlet Fever	..	1	Measles ...	...	2
Enteric Fever	...	4	Whooping Cough	...	17
Diphtheria	...	1	Epidemic Influenza	...	2
Erysipelas	...	1	Zymotic Enteritis	...	16
Smallpox	...	4			
		11			37

CIRCUMSTANCES AFFECTING THE PUBLIC HEALTH.

This is a subject too large to be fully dealt with in a report of this nature ; it may however be well to lay before you a few of the many conditions which exist in the district which act deleteriously on the health of the people.

1. Soil and Climate.—The fact of our living in a climate subject to constantly recurring changes often great in degree and within a very short period of time predeposes to many of the more common ailments prevalent in the district. These variable climatic conditions of themselves have an important bearing on the public health, but taken in conjunction with the effect they may have on the fluctuation of ground air and water in the neighbourhood of houses the results are still more important.

It is a well established fact that a condition of dampness and moisture in the site and air of a house predisposes to the production of numerous diseases such as Catarrhs, Bronchial and Pulmonary Affections, Rheumatism, Diphtheria, Measles, Whooping Cough, &c.

Many of the houses in the district are built in such a way that the floors are directly on the soil, and these floors are frequently constructed of permeable materials so that there is a ready chance of polluted ground air and moisture to gain access to the ground floor rooms. The fact that most of these diseases are common and frequent in the district and are responsible year by year for a large proportion of the total deaths makes me have no hesitation in urging the Council to take steps to remedy the state of affairs.

2. Warming of the Houses.—Many of the houses, or I should perhaps say the principal living rooms in many of the houses, are kept too heated. One reason for this is that coal is plentiful and moderate in price ; another reason is that a considerable number of the houses have damp walls and the idea is prevalent that a considerable degree of heat kept up in the house will make these walls drier ; a further reason is, as far as the miners are concerned at least, that they work in a fairly warm atmosphere and do not bear cold well ; it may be further mentioned that in many miners' houses cooking goes on for the greater part of the day and large fires are kept up for this purpose.

The overheating of the living rooms—the heating being generally above the ordinary outside temperature—tends greatly in the class of house already mentioned to promote the suction of this foul ground air into the house and the evaporation of the moisture from the ground water. This is an important factor in the production of summer diarrhœa and dysentry, as it also is a predisposing factor in such diseases as puerperal fever, erysipelas, pyæmia, septicæmia, &c. The overheating of the rooms also tends to lowering the resistance of the inmates to colds with the result that as a community the people of this district are perhaps more susceptible to colds than are the people in say a purely agricultural part of the country.

3. Ventilation of the Houses.—The average miner believes in ventilation and with good reason in the mine ; it is questionable whether he upholds his belief as strongly in the ventilation of his own house. It is a common thing in a miner's house to find a bedroom fireplace boarded across or blocked or pasted up with paper, the alleged reason frequently being that were the fireplace not so treated there would be a downdraught of smoke ; this is not always so. It is not common to see a window well opened even in the hottest season of the year. Even in bedrooms where there is no fireplace and the only window is a skylight it is no uncommon occurence to find these skylights closed all day and all night.

If people will not take advantage of the means of ventilation at their disposal I do not see how the matter is to be remedied. There is no doubt that this abhorrence to adequate ventilation in the home has a bad effect on the health of the inmates and in cases of sickness and accident it often greatly retards the recovery of the patient and hampers the medical attendant in the performance of his duties. This is a question with which the people themselves ought to deal.

4. Sewerage.—As regards the colliery rows the majority of them are sewered by means of open channels leading into main sewers. These channels are constructed sometimes of tiles, stoneware or earthenware, glazed in the newer ones, plain in the older ones, cemented or simply laid together at the joints, which between the older tiles are straight and between the newer ones bevelled ; sometimes of bricks set in mortar or simply laid together, and sometimes the channel is made of cement. The sewage which goes down these channels is practically limited to the waste water from cooking, washing, &c., except in the case of dirty people who put all sorts of slops in the channel. No provision is made to prevent soakage or overflow into the ground between the sewer and the house with the result that the ground air and water frequently becomes polluted and by suction due to the hotter air within may get into the houses and lower the standard of health as already indicated.

5. Excremant Disposal.—In the older types of privies and ashpits similar results to the above may occur from soakage as many of these ashpits are not bottomed.

The existing privy and midden system is I believe largely responsible for a form of sore throat—an Infective and Infectious Tonsillitis—so common in certain seasons of the year in this district. I do not see how this can be remedied without putting the district to an enormous expense which may not be altogether warrantable as these diceases are easily enough cured as a general rule.

6. Water Supply for Personal Ablution.—The fact that the majority of houses have no water laid into them and that baths are uncommon does not tend to raise the standard of personal cleanliness. This want of bathing gives rise to many skin troubles and if once certain skin diseases invade a house they frequently attack all the members. It is a point too worth discussing whether the laying of water into the houses might not in the long run lead to a saving in the wastage. At present a large quantity of water is wasted weekly by the taps at the ends of open channels being allowed to run for a considerable time.

7. Clothing.—The clothes worn by the majority of the people of the district are of a cheap quality, but this is made up for to some extent in the quantity as a considerable proportion of the populatian being accustomed to live in hot rooms and not being in the habit of going out much during the week bear cold badly. Flannel or woollen is not worn much next the skin unless in the way of chest protectors, lumbago or diarrhœa belts, the substitute being such cheaper and less durable material as the various cotton mixtures, particularly flannelette. As an even and equable temperature can not be maintained by wearing this kind of under-garment the result is that people readily get chills.

While on the subject of clothing the foot-gear ought not to be forgotten, as in the winter time and in bad weather at any time of the year when the roads and paths in many of the colliery rows and elsewhere are in a deplorable condition the wearing of suitable foot-gear is important from the point of view both of health and comfort. I am glad to see that clogs are again coming into more general use among the women and children, and a form of boot with wooden soles and leather uppers lined inside with felt among a considerable section of the adult males ; these are much more suitable for the mud and moisture in spring, autumn and winter, than the canvas and other slippers and the cheap boots in common use in the district.

One cannot help noticing when going round the houses in the district that a large number of the females wear cloth or canvas shoes or shoes made of fairly absorbent materials. In the best of weather this type of foot-gear is not good and in bad weather it is almost the worst that could be worn considering the amount of mud and moisture about the doors. The female section of the population being the chief offenders in this matter ought to be better advised by the male section, as a female population whose vitality is lowered by exposure to and suffering from the many diseases that may be induced by such exposure cannot be expected to be fit to rear a healthy offspring.

It has long been a popular as well as a professional axiom that sudden vicissitudes of temperature are dangerous ; this proposition bowever requires a certain amount of limitation. The effects of a sudden descent or ascent from one point to another in the scale of atmospheric temperature—a frequent occurrence in this district—varies according to the state of the body at the time. Without going into any physiological discussion respecting the source of animal heat I may just remind you of the faculty of evolving heat possessed by man and the warm blooded animals by which faculty very nearly the same degree of inward temperature is steadily maintained under very different degrees of outward temperature. The point to be noted as regards the maintenance of this desirable state of equilibrium is that we must if possible so clothe ourselves that we are able to conserve the body heat naturally evolved and so be better fitted to resist these external variations. The bad effects of sudden variations of temperature upon the system depend partly upen the intensity of the sensation produced but still more upon the duration of that sensation and the morbific effects of cold particularly upon the system is certainly modified by the degree of attention that is paid to the sensation it excites. We are seldom the worse for a momentary sensation of cold however lively it may have been whereas even slight feelings of chilliness if long protracted are apt to terminate in some form of disease. Now the particular forms of underclothing that are in common use here do not assist the individual to conserve the natural heat of the body; on the other hand they tend to aggravate the natural loss of heat and so favour the production and protraction of this feelIng of chilliness which is so apt to usher in disease in some form or other. Further the infurious effect of this chilliness or cold is augmented when it is accompanied by moisture—clamminess—and all of us I think believe that wetness is notoriously the worst way in which cold can be applied for any length of time to the body. The contact of wet or damp clothes with the skin both increases and prolongs the sensation of cold ; the heat of the body is abstracted more rapidly than it is generated, and these particular forms of clothing that tend to keep up this condition of affairs naturally lead to the lowering of the resistance of the body to the onset of disease. Flannel or wool is a bad conductor but a good conserver of heat, whereas these other mixtures mentioned are of an opposite nature and in the process of *hardening* children which is a common practice in the district are essontially wrong in principle

During the early and later periods of life the inherent protective power of evolving heat is comparatively feeble and in our climate requires to be carefully cherished, as the resisting power against disease is also more feeble

at the extremes of life, and our mortality tables show that the results bear out this weakness of resistance, it is most important that we should study carefully anything that tends to enable the body to resist disease. The education of the public taste in the matter of clothing is a subject which has a most important bearing on the public health and often too on the safety of the individual. In this latter respect I allude to the well-known inflammable nature of flannelette which is responsible for so many fatalities and disfigurements among the younger sections of the populace. I would therefore urge very strongly on the public the advisability of giving up the use of such materials for underclothing entirely as they are of no possible benefit to them and are a source of danger to their health.

8. Food and Drink.—One may state broadly that a considerable section of the populace lives well; whether this section lives wisely is another question. As regards the male element in the mining part of the community it may be roughly stated that as a general rule the principal meal is taken shortly after the return from work. Frequently the principal meal a heavy meal is taken and then the man goes off to sleep. These meals frequently vary too in time according to the time the miner comes home from his work. The result of this method of feeding is seen in the frequency of dyspepsia and liver troubles among them. Other meals are taken to suit the convenience of the family as far as possible. The result of this is that in many houses meals are being cooked and served nearly all day long—a hard task for the women. In some houses as many as 5 meals corresponding to dinner are cooked and eaten in one day. The majority of the people are free eaters and consume considerable quantities of meat. Puddings of various sorts are extensively eaten—suet dumplings being a favourite form and frequently eaten before the meat Potatoes and bread (generally home baked) are staple articles of diet, and large quantities of vegetables are eaten. Vinegar, pickles, spices and most condiments and sauces are partaken of largely. Food is often cooked in a most unmethodical manner and the waste is often great. One may say roughly that the class of food now eaten in a mining district (as over most of the county) is of a soft nature and one bad result of this is that the teeth do not get the work to do which they ought to have, the result being that it is quite an uncommon thing to see a miner of 35 years with a full or even a half set of good sound teeth of his own; this statement is equally true of the female sex in this district. The want of teeth and the possession of unsound teeth predispose to many gastric and other troubles, and from this fact we may readily judge how important it is that the female element of the community ought to be taught to cook properly and the community as a whole instructed in the use of the class of food-stuffs most suitable for their occupation and mode of life. This is a subject the elementary aspects of which ought to be taught in the schools. As regards the drink question in the district I think this district is no worse in this respect than the surrounding districts. The general custom among the drinking section of the community is a fortnightly debauch and not a very serious one at that. which is preferable from a health point of view to the daily tipple common in some parts of the country.

There are one or two points on the drink question that it would be well for people to remember. Alcohol in any shape or form has little food value; it is useful as times as a stimulant, but then the need for stimulation should be known.

A miner should realize that hard and strenuous work such as his work often is can not be successfully performed for any length of time on drink, as drink has a distinctly lowering influence on the muscular tone and a marked tendency to reduce the working power of the heart. It may be well too for a man to remember that by indulging in excesses in drinking he is paving the way for a steadier man to succeed him.

Nursing women should not allow themselves to be persuaded by friends that drink is "support;" food and good wholesome food at that being the only true support for her and through her for her offspring; drink in such cases being an insidious poison which directly effects a suckling child through the milk of the mother.

9. Efficient Ventilation in the Mines.—Miners frequently complain that they suffer from "bad air" in the mine and no doubt they do sometimes as the medical men of the district can testify, but as this is a question which they have the privilege and power of rectifying or causing to be rectified for themselves I am of the opinion that it is not a question for the council to deal with unless in some very exceptional circumstance. By the courtesy of a mine manager in the district I have had opportunities of studying this question and I think many difficulties in this respect can be easily settled between men and masters if gone about in a proper way, and I think that mine managers as a general rule are as anxious to have the mine properly ventilated as the men are, even if one looks at the matter purely from an economic point of view.

10. Dust as a Factor in the Production of Disease.—The discomforts induced by dust are well known and its detrimental effect on articles of furniture and apparel in the household get due recognition from the majority of our housewives. Our Sanitary authorities as a rule while alive to the discomfort produced by dust are not particular enough in attempting to mitigate the evils produced by it, probably because most of them do not sufficiently consider dust as a serious disease producer. As far as I am aware lawyers are perhaps the only section of the community who really seem to have a predilection for dust, due no doubt to their familiarity with dusty tomes. In the administration of local laws n any sanitary authorities are guided by lawyers, and this association may to

some extent account for their failure to pay due attention to the disadvantages of dust. Motorists are doing good service in awakening our natural hostility to dust, and from a sanitary point of view in this respect good may come out of evil as if we get a sufficient number of motorists to career through the district we may the sooner recognise that dust is an evil with which we will have to deal.

Much of the dust in our district is no doubt comparatively inert inorganic matter but a considerable amount of it is dirt of a distinctly harmful character and often dangerous to health if it gets into our food or is inhaled by us. Bacteriologists have amply demonstrated that it is a fruitful disseminator of disease germs and have made it clear that Sanitarians will have every day to pay more and more attention to all reasonable methods invented towards allaying the evil. In a mining district such as this one naturally thinks of the dusts in the mine. The more harmful of these dusts are those from the post and seggar clay, both of which are liable to produce Fibroid Phthisis and Asthma in miners; the principal dust of an organic nature found in the mine is that produced from animals detritus and is liable to set up in the miner an infectious form of Tonsillitis. Efficient watering of the mines will mitigate these evils; of course other diseases such as Tetanus, Erysipelas, Septic wound troubles, Ankylostomiasis, Typhoid Fever, Diarrhœa and Enteritis, &c, may be caused by dust in the mine getting into wounds or getting in the water drunk or the food that is eaten. Outside of the mine many of these factors are also at work. As generally arranged the rooms of most houses are dust traps. Here many of the upstair floors have crevices between the boards into which dust drops to gradually accumulate between the floor and the paper ceiling; cumbersome articles of furniture which collect dust above and are too heavy to be frequently moved to allow of dust to be swept from below; heavy curtains and bed-hangings; rough walls and rougher paper often containing arsenic; numerous rugs, mats, &c. All these tend to the collection and absorption of dust which often being unseen is forgotten and not removed. It is especially in bedrooms, and here many of the living rooms and kitchens are used as bedrooms also, which are occupied for so many hours of the day without any thorough renewal of the air, that these dust absorbers and accumulators tend to do so much harm by contaminating an atmosphere already vitiated. In the main streets this year the watering has been better attended to than heretofore but much yet remains to be done for the other streets and rows. It has been particularly noticeable that several of the dust diseases have been less prevalent in the houses abutting the best watered roadways than in those where the water cart is never seen.

As palliatives to the production of dust it might be advisable for the Council to try the effect of Westrumite or Akonia on some of the roads. Their use is not very expensive and their effect on dust is so much more enduring than mere watering, that it seems as though they might well be applied in the interests of the public health on some sections of the roads and streets of the district.

The Automobile Club has this year been investigating various kinds of material used in road construction to prevent the raising of dust. They seem to have come to the conclusion that "Tarmac" is about as good as any. By the use of this process dust formation can to a considerable degree be avoided altogether if roads are correctly constructed with this object in view. The process briefly consists in building a road of slag taken hot from the furnace and dipped in tar till it is soaked from surface to centre. The road should have a hard foundation which will not work out through the top and have a smooth impermeable enduring surface. I beg the Council to take into consideration the advisability of having such roads constructed where new rows of houses are being erected and also in yards which need to be put into a proper sanitary condition. I am not able to give the comparative cost but perhaps the Surveyor may be able to go into the matter and advise the Council. I think it would be possible to obtain a considerable quantity of slag in the immediate neighbourhood. The ordinary whinstone used on the roads in the district might be treated by a similar process. In this question of dust diseases I have purposely omitted the diseases which may arise from dust in the form of pollen from various plants and from flour and other dusts common in ordinary trade processes, as the discussion of these matters would occupy too much time.

11. Schools.—The Schools in the district are more or less overcrowded and in most of them the arrangements of the privies is not satisfactory. I hope this state of affairs will soon be put right. These conditions no doubt act deleteriously on the health of the scholars, but a factor in school life which influences this and which in itself has an important bearing on the physique of the community of the future is the age at which children are sent to school. The age at which a child may attend school is 3 years, and many in this district are sent to school when they have attained this tender age; after a child has attained the age of 5 years its parents or guardians are legally bound to send it to school or make private provision for its education. I am strongly of opinion that children ought not to be sent to school so young and I firmly believe that future generations will become more degenerate in physique and intellect the more rigidly the school attendance at these early years is enforced or the more freely it is encouraged.

For the good of the nation it is essential that the physical powers of a child be allowed full scope to develod and though it exceptionally happens that we find a bright intellect in a deformed frame the healthy and vigorous body is usually the one which carries the active and progressive brain. The fact that overcrowding exists in the schools of the district depends to a considerable degree on the fact that infants between the ages of 3 and 5 years are allowed to go to school. The reason for this is twofold—firstly, a considerable number of mothers are of the

opinion, and to a certain extent I regret to say they are right in that opinion, that their infants are better looked after when at school than they are at home and that they have less responsibility in connection with them and that the children themselves are less of a nuisance (sic !) to them—the mothers ; secondly, the parents receive a certain amount of encouragement from the school managers by reason of the possibility of an increased "grant" for the school. One must admit in fair argument that as little as possible is taken out of the infants at school, that they get a certain amount of teaching which they are capable of appreciating, that they get some physical drill and so on, bnt 1 would like to ask all thinking members of the community and more especially the school managers, who are are now to some extent appointed by the Council which is the Sanitary Authority and consequently the authority which is responsible for the physical welfare of the inhabitants of the district, whether either mentally or physically these children are likely to benefit from the instruction they get. My own opinion is that no child should be allowed to go to school till it has attained the age of 7 years, and that its parents should not be compelled to send it to school till it is 10 years of age, and even allowing for its being withdrawn from school when it reaches the age of 14 as at present I maintain that the child would learn more in the 7 or 4 years as the case may be, and be in a position to carry more knowledge (as apart from crammed work) away with it than it does under the present system.

Looking at the matter from the physical aspect those of us who have to deal with Diseases of Children are aware how largely schools are responsible for the dissemination of disease. We know that at the school age children are particularly susceptible to the different infectious diseases, e.g. Scarlet Fever, Measles, Whooping Cough, Mumps, Chicken Pox, &c., and if as frequently happens the schools are overcrowded the liability to infection is increased. You will see from the returns for scarlet fever (the other diseases mentioned not being notifiable in the district and exact statistics not being available) what a large proportion of children at the school age are attacked. Of course the liability would still be there if they were kept at home but I do not think the attack rate would be so great as many cases are no doubt due to infection from mild unrecognised cases which have been allowed to go to school (and even from recognised cases which the parents have ignored and where they have not called in a medical man as they wanted their children ont of the way) and which have spread the infection broadcast through close association with other scholars. In regard to other infectious diseases, e.g., Tuberculosis, Ringworm, Impetigo, Itch, &c., many instances of the way in which these diseases are spread could be cited. Of tuberculosis one may say that in this respect at any rate the infection is mainly spread by inhalation, and in a crowded school with a vitiated atmosphere polluted by tuberculous exhalations the chances are that many weakly children may contract the disease there.. The other diseases mentioned are mainly spread by direct contact, and all of us know the habits of school children in interchanging caps, bonnets and other articles of raiment, and we see daily the result of the habit in the spreading of these as well as of other communicable diseases. Teachers cannot efficiently supervise this ; it can only be done properly in the home and if it is not done there effectually the parents are responsible for the consequences (as they ought to be). As regards physical drill for infants and even for children up to what I consider the proper school age, I believe that if one naturally allows a child to develop its own physical powers the result will be better. In this district there is ample room for a child to develop its muscle and plenty of facilities for its getting a sufficient supply of fresh air during the day time. Let it make its playground as an infant in the coal cree and as an older child let it make its castles in the duff heaps and gather daisies and dandelions in the patches of grass available to it, and it will exercise its muscles and develop its frame in a much more scientific manner than it possibly can do by any other system of physical drill yet invented. The development of its intellectual faculties should at this early age devolve greatly on the parents but also largely on the child's own capacity for recognising what it sees about it.

In regard to the older children in school I should like to see in the curriculum a course of elementary hygiene, but before that can be taught efficiently by the teachers in the schools they will have to go through a proper course of instruction themselves. The County Council syllabus of a course in hygiene for teachers is not complete enough. For the ultimate benefit of the community it is absolutely necessary to make personal and domestic hygiene a compulsory subject in schools. The present system of education requires radical alteration ; it is not education—drawing out and leading on—but cramming. But even under the present system there are opportunities for the teachers to impart knowledge of the laws of health. At the morning recreation hour often utilised for physical drill would it not be wise when imparting the instruction in drill to teach the children the why and wherefore of it, e.g., the necessity for inhaling fresh air, the exercise of the muscles and the lungs, the ventilation of the schoolrooms, the reason for play, e.g., as a relief from mental strain, &c.

Would it not be wise to have a garden attached to each school where the children, class by class, could have their own little plots and learn the innumerable lessons to be gained from seeing natures' ways, e.g., they would see supposed waste matter and dead leaves, &c., go to tbe soil and learn the lesson that nothing need be wasted, they would see life come from life, like produce its like whether the seed be bad or good ; they would be present at the sowing of the crop and they would see nature bring forth the harvest ; then they might learn that certain plants were good for certain things, others for other things, that some were poisonous, others not harmful. I would like too, as Medical Officer, to ask the teachers to take certain of the older children down to the hospitals when they are clear and show them the different things there and explain in plain terms why this, that and the other thing was provided. I commend these brief remarks to the notice of the Education Committee.

FACTORIES, WORKSHOPS AND WORKPLACES.

1.—INSPECTION.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OR INSPECTORS OF NUISANCES.

Premises.	Number of Inspections.	Written Notices.	Prosecutions.
FACTORIES	28	None.	None.
WORKSHOPS	128	,,	,,
WORKPLACES	48	,,	,,
	204	None.	None.

2.—DEFECTS FOUND.

Particulars.	Number of Defects. Found.	Remedied.	Referred to H.M. Inspector	Number of Prosecutions.
Nuisances under the Public Health Acts:—				
Want of cleanliness	Several.	Yes.	No.	None.
Want of Ventilation	None.			
Overcrowding	,,			
Want of drainage of floors	,,			
Other nuisances	Several.	Yes.	No.	None.
Sanitary accommodations { insufficient / unsuitable or defective / not separate for sexes }	Public Health Acts Amendment Act, 1890, not adopted.			
Offences under the Factory and Workshop Act:—				
Illegal occupation of underground bakehouse (S. 101)	None.			
Breach of special sanitary requirements for bakehouses (SS. 97 to 100)	,,			
Failure as regards lists of outworkers (S. 107)	,,			
Giving out work to be done in premises which are { unwholesome (S. 108) / infected (S. 110)	,,			
Allowing wearing apparel to be made in premises infected by scarlet fever or smallpox (S. 109)	,,			
Other offences	,,			

3.—OTHER MATTERS.

Class.	Number.
Natters notified to H.M. Inspectors of Factories:—	
Failure to affix Abstract of the Factory and Workshop Act (S. 133)	None.
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory Act (S. 5) { Notified by H.M. Inspector	,,
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory Act (S. 5) { Reports (of action taken) sent to H.M. Inspectors	,,
Other	,,
Underground Bakehouses (S. 101):—	
In use during 1903	One.
Certificates granted { in 1903	None.
Certificates granted { in 1904	None.
In use at the end of 1904	,,

Homework:—	Number of Lists.	Outworkers
Lists of Outworkers (S. 107):—		
Lists received	None.	None.
Addresses of Outworkers { forwarded to other Authorities	,,	
Addresses of Outworkers { received from other Authorities	,,	

Homework in unwholesome or infected premises:—	Wearing Apparel.	Other.
Notices prohibiting homework in unwholesome premises (S. 108)	None.	None.
Cases of infectious disease notified in homeworkers' premises	,,	,,
Orders prohibiting homework in infected premises (S. 110)	,,	,,

Workshops on the Register (S. 131) at the end of 1904.

Cycle Factory, Brick Works, Ærated Water Works, Tailoring, Bakeries, Quarry, Joinery, Sawmill, Candle Works, Saddlers, Blacksmiths, Printing, Dressmaking, Tinsmith, Fish and Chip and Ice Cream Shops, &c.

Total number of workshops on Register ... 75

All Factories, Workshops and Workplaces, as far as known have been inspected during the year. The only underground Bakehouse which was in the district has been abolished. The classes of workplaces which call for special note are the Fish and Chip Shops and Ice Cream establishments. At all times of the year but more especially in the summer and the early autumn these places are of themselves somewhat of the nature of a nuisance to those living near them, and the food stuffs sold are frequently responsible for serious cases of illness. It is advisable that regulations be made for the proper control of these establishments.

GENERAL REMARKS AND CONSIDERATION OF DISEASE TABLE.

Diseases of the Respiratory Organs.—91 deaths occurred primarily due to diseases affecting the respiratory system and a very large number of other diseases causing death were complicated by respiratory troubles. From Table IV appended to the report it will be seen that these deaths are made up as follows :—Pneumonia 26, Bronchitis 23, Pulmonary Phthisis 22, Whooping Cough 17*, Pleurisy 1, and other Respiratory Diseases 2. This is appalling—nearly one-fourth of the total number of deaths from all causes. How many of these deaths are due to the trying nature of the climate, the coldness and dampness of the soil, the dampness of the floors and walls of many of the houses, overcrowding and neglect of proper ventilation in the houses, the unsuitable nature and much of the clothing worn by the people, the habit of exposing tender infants to extreme vicissitudes of temperature, and the bad condition of many of the roads, streets and back yards in the district ! Who can tell ?

*Whooping Cough is also classed under Zymotic Diseases.

Diarrhœa and Enteritis.—47 deaths were due to these diseases, 38 of them being of infants under 1 year of age. As these are commonly recognised as preventible diseases and are causes of death which year by year swell our mortality returns, and are largely due to ignorance and carelessness and want of thought, it may be advisable in the interests of the public health to recapitulate a few of the causes of these diseases which have been mentioned from time to time in the monthly reports.

1. *Overfeeding.*—It is a common practice in the district for mothers and those in charge of infants to overfeed them. The prevailing idea which leads them to do this seems to be the notion that if a child cries it wants food ; many do not appear to realise the fact that a child cries for many other reasons than want of food. An observant mother soon knows what the different cries and articulations of a child mean. Such a mother will not be apt to ruin her child's digestion and she will soon recognise that overfeeding an infant is another way of starving it. Mothers and nurses who feed a child whenever it cries are incompetent to have charge of infants.

2. *Feeding with unsuitable food.*—With all the different nostra in the market it is no wonder that mothers are apt to make mistakes in this respect. Nearly every patent food is stated to be a perfect substitute for the mother's milk ; the great majority of these foods are far from being so, and the proper use of them involves more trouble than the average caretaker of an infant will take. Further they are for the most part far too expensive for the average householder in this district to afford. The sooner our legislators have the courage to frame laws to protect the public against fraudulent advertisements of all kinds from false statements regarding the value of patent foods to all sorts and conditions of quack nostra the better for the public health.

Cow's milk and properly made condensed milk, if given strictly under Doctor's orders, make more suitable substitutes for mother's milk than most of the patent foods. Apart from the errors in giving these foods many mothers make the mistake of giving their children pickings from the table when they are not of an age to assimilate such diet. Food which is too rich or too nutritious for an infant should not be given at all and the changing of the diet of an infant is a matter that is rarely properly considered. Mothers should remember that for the first 8 to 10 months at least of an infant's life the child should get no other food than milk in some form.

3. *Want of method in Feeding.*—Those in charge of an infant should remember than an infant's stomach and digestive organs are relatively much more delicate than their own and that it is the height of folly to expect a child to remain healthy if it is fed without discrimination and judgment. A child should be taught from the first week of its life to have its meals at regular times and in regular quantities ; mothers and nurses ought to remember that if they themselves were fed at all sorts of odd times and with all sorts of odd quantities of food they could not have healthy digestive organs ; how much more careful then ought they to be of the tender uneducated digestive organs of their infants ? It is an old saying and a true one that a weak stomach is nearly always a misused stomach, and people therefore cannot be too careful about misusing the stomachs of their children as misuse in infancy is nearly certain to result in misery in adult life.

An important point in want of method in feeding an infant is the small amount of care that is taken in regard to the position of the child when it is being fed. A child fed on the breast is kept in a more or less natural position, i.e., slightly inclined ; how many bottle fed children are held in a similar position while being fed ? It is a great pity that those of us who see how such things are done cannot insist on the mother or nurse taking her own meals in a similar position to that in which she places the child when giving it its meals. If such were possible few children would be fed when lying on their backs as few mothers or nurses would be inclined to take their own meals in such an uncomfortable position.

4. *Exposure to Chills.*—An infant ought to be suitably clad in light warm and flexible garments and ought not on any account be exposed to vicissitudes of temperature. Theatres, music halls and places of entertainment should be closed at night against infants in arms ; the Society for the prevention of cruelty to children should be empowered to take action against people who take infants to such places and their action ought to be supported by our magistrates.

5. *Inattention to ordinary rules of cleanliness.*—This is a common cause of Infantile Diarrhœa ; a dirty house means dirty food ; dirty food is contaminated food ; contaminated food is frequently an irritant poison, and this irritant poison is far too often the cause of death of an infant. The medicolegal position here is a curious one.

6. *The giving of Stimulants to Infants.*—Mothers should be warned against the foolish ideas prevalent about giving stimulants such as gin, whisky, brandy, wine, beer, &c., to infants for the various troubles they fancy the children are suffering from. It is rarely that a child needs any stimulant and the notion that such things are "support" is almost too absurd to take notice of were it not for the fact that many children are yearly brought to a premature grave through ignorance of their mothers on such matters.

7. *Castor Oil and Purgatives.*—The irritant action of this class of medicine on the intestinal mucous membrane of a young infant is often irremediable and is often a factor in the production of Enteritis. An old woman is not likely to know the danger involved in the administration of castor oil to a young infant; she may however be able to realise to some extent the discomfort produced; let therefore every woman who gives a teaspoonful of castor oil to an almost newly born child take a good big breakfast cupful herself and I fancy the practice so common here of giving it will soon cease.

Cancer and Malignant Disease.—17 deaths are attributed to these diseases being 2 more than last year. I am unable to satisfactorily account for the increase.

Heart Disease.—34 deaths were notified under this heading as against 25 last year. The prevalence of heart disease is no doubt due largely to the arduous nature of the miner's work and the intermittant heavy strains to which he is subjected; in the case of the females the amount of work they have to do and the nature of it and also their manner of living contribute largely to the production of heart disease. Very few cases of congenital heart disease occur.

Nervous Diseases again figure largely in the death returns, 28 deaths occurring as compared with 23 last year. Hereditary influences seem to bear considerably on the causation of these troubles.

Infantile Atrophy.—20 deaths are recorded from this cause while 35 occurred in the previous year. I am glad to be able to report an improvement here as many of these deaths are due to preventible causes, e.g. ignorance in the manner of feeding and rearing infants.

THE FOLLOWING AMONG OTHER IMPROVEMENTS ARE NEEDED.

1. Conversion of West Sleekburn gutter into a sewer.
2. Shifting of traps in open channels in several places at the ends of colliery rows and in other places where they are at present too near the pantry windows.
3. Better lighting arrangements in the district generally. (This subject is at present occupying the attention of the Council.)
4. The making of better roads in many of the Colliery Rows and in other parts of the district where streets of houses exist.
5. Alterations in the privy arrangements in most of the Schools.
6. Dealing with such places as the Back of Scotland Gate (1st part) and Walker Terrace as unhealthy areas or obstructive buildings.
7. The making of New Bye-Laws.
8. Relaying of several of the old sewers.
9. Bottoming of many of the ashpits.
10. The improvement of most of the footpaths in the district.

In addition to several improvements mentioned in the body of the report under particular headings the following among other improvements have been carried out.

The road at the back of Scotland Gate has been lowered as has that in Catholic Row.

The road from Choppington Station to Sleekburn via Barrington has been greatly improved during the year as have several of the roadways in Barrington Colliery.

Additional lamps have been erected in Bedlington where they were needed.

During the year 1550 lineal yards of tar macadam footpath have been laid in the district:—150 yards in Front Street, Bedlington; 590 yards between Bedlington Station and Red Row, and 810 yards at Cambois.

Another important improvement which has been carried out is the laying of a road across the ford at the Furnace: this has been a great boon to tradesmen and others who have to use it.

GENERAL REMARKS.

This has been an exceptionally busy year for the members of the Council, many important schemes for the benefit of the district having been under consideration.

I beg to thank you, Gentlemen, for the kind and courteous manner in which you have aided me in the performance of my duties.

I am, your obedient servant,

ROBERT S. TROTTER,

Medical Officer of Health.

TABLE I.

Vital Statistics of Whole District during 1904 and previous Years.

Name of district, BEDLINGTONSHIRE.

Year.	Population estimated to Middle of each Year.	Births.		Total Deaths Registered in the District.				Total Deaths in Public Institutions in the District.	Deaths of Non-residents registered in Public Institutions in the District	Deaths of residents registered in Public Institutions beyond the District	Nett Deaths at all Ages belonging to the District.	
				Under 1 Year of age.		At all Ages.						
		Number	Rate.	Number.	Rate per 1000 Births registered	Number.	Rate.				Number.	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1894	17000	778	42	120	154	316	18					
1895	18000	837	46	154	183	410	22					
1896	18000	824	45	118	143	292	16·2					
1897	18000	784	43	113	144	322	17					
1898	18000	725	40	140	193	341	18					
1899	18000	741	41	170	229	401	22					
1900	18000	713	39	125	175	369	20·5					
1901	18500	789	42·6	144	182	362	19·5					
1902	19500	693	35·5	93	134	289	14·8					
1903	20000	735	36·75	127	172	374	18·7	5			374	18·7
Averages for years 1894-1903.	18300	762	41	130	170	347	18·7					
1904	20000	729	36	132	181	367	18	4			367	18

Rates in Columns 4, 8, and 13 calculated per 1,000 of estimated population.

Note.—The deaths to be included in Column 7 of this table are the whole of those registered during the year as having actually occurred within the district or division. The deaths to be included in Column 12 are the number in Column 7, corrected by the substraction of the number in Column 10 and the addition of the number in Column 11.

By the term "Non-residents" is meant persons brought into the district on account of sickness or infirmity and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere.

The "Public institutions" to be taken into account for the purposes of these Tables are those into which persons are habitually received on account of sickness or infirmity, such as hospitals, whorkhouses and lunatic asylums. A list of the Institutions in respect of the deaths in which corrections have been made should be given on the back of this Table.

Area of District in acres (exclusive of area covered by water) } 8435½

Total population at all ages, 18,766 ...
Number of inhabited houses, 3,763 ... } At Census of 1901.
Average number of persons per house, 5...

I.	II.	III.
Institutions within the District receiving sick and infirm persons from outside the District.	Institutions outside the District receiving sick and infirm persons from the District.	Other Institutions, the deaths in which have been distributed among the several localities in the District.
	Union Workhouse, Morpeth. County Asylum, Morpeth. Royal Infirmary, Newcastle-upon-Tyne. Prudhoe Memorial Home, Whitley Bay.	

Is the Union Workhouse within the District? No.

TABLE III.

Cases of Infectious Disease notified during the Year 1904.

Name of District, BEDLINGTONSHIRE.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.							TOTAL CASES NOTIFIED IN EACH LOCALITY.							NO. OF CASES REMOVED FROM EACH LOCALITY.						
	At all Ages.	At Ages† — Years.						Barrington	Bedlington	Cambois	Choppington	Netherton	Sleekburn	East & West Sleekburn	1	2	3	4	4	6 H	7 H
		Under 1	1 to 5	5 to 15	15 to 25	25 to 65	65 and upwds														
Smallpox ...	30		2	11	4	13			17		1	10	2			17		1	10	2	
Cholera																					
Diphtheria ...	3			3							2			1							
Membranous croup																					
Erysipelas ...	19	1		1	2	13	2	1	5	6	5		2								
Scarlet fever ...	109	3	39	65	2			17	22	33	24		9	4							
Typhus fever ...																					
Enteric fever ...	22		2	6	5	9		3	2	6	8		1	2							
Relapsing fever ...																					
Continued fever ...	1		1							1											
Puerperal fever ...	1				1							1									
Plague																					
*																					
Totals ...	185	4	44	86	14	35	2	21	46	46	40	11	14	7		17		1	10	2	

NOTES.—The localities adopted for this table should be the same as those in Tables II and IV.

State in space below the name of the isolation hospital, if any, to which residents in the district, suffering from infectious disease, are usually sent. Mark (H) the locality in which it is situated, or if not within the district, state where it is situated, and in what district. Mark (W) the locality in which a workhouse is situated.

* This space may be used for record of other disease the notification (compulsory or voluntary) of which is in force in the district.

† These age columns for notifications should be filled up in all cases where the Medical Officer of Health, by inquiry or otherwise, has obtained the necessary information.

Isolation Hospitals—at Stakeford and Staithes Quay, Bank Top.

TABLE IV.

Causes of, and Ages at, Deaths during the year 1904.

Name of district, BEDLINGTONSHIRE.

Causes of Death.	Deaths at the subjoined ages of "Residents" whether occurring in or beyond the District.							Deaths at all ages of "Residents" belonging to localities, whether occurring in or beyond the Dist.							Total Deaths whether of residents or non residents in public institutions in the district.
	All ages	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Barrington.	Bedlington.	Cambois	Choppingt'n	Netherton.	Sleekburn.	East & West Sleekburn.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Smallpox	4		1			3			4*						4*
Measles	2	2						1	1						
Scarlet Fever.. ...	1	1									1				
Whooping-cough ...	17	8	9					1	6		7	1	2		
Diphtheria and Membranous croup ...	1			1							1				
Fever { Typhus ...															
Fever { Enteric ...	4		1		2	1				2	2				
Fever { Other continued															
Epidemic influenza ...	2					2			1	1					
Cholera															
Plague															
Diarrhœa (*See* notes opposite)	16	14	2					1	7	5			2	1	
Enteritis (*See* notes opposite)	31	24	3	1		1	2	5	11	2	6	2	5		
Puerperal fever (*See* notes opposite)															
Erysipelas	1	1								1					
Other septic diseases ..	4	1	2			1			1	1	1		1		
Phthisis (Pulmonary Tuberculosis) ...	22		1	1	4	15	1	1	10	6	5				
Other tubercular diseases	17	5	7	4		1		1	2	1	7	1	4	1	
Cancer, malignant disease (*See* notes opposite) ...	17					11	6	1	8	2	3	1	2		
Bronchitis	23	14	4		1	2	2	1	8	2	7	2		3	
Pneumonia	26	5	11	3	4	2	1	1	5	1	8	1	7	3	
Pleurisy	1					1					1				
Other diseases of Respiratory organs ...	2	1	1									2			
Alcoholism } ...	3					3				1			2		
Cirrhosis of liver }															
Venereal diseases ...															
Premature birth ...	22	22							6	2	6	1	4	3	
Diseases and accidents of parturition ...	5					5			1		3		1		
Heart diseases ...	34	2	1	1	1	20	9	2	13	2	4	1	8	4	
Accidents	10		1		3	5	1		6	1	1		2		
Suicides	1					1							1		
Infantile Atrophy ...	20	18	2					1	4	1	6		6	2	
Cerebral Hœmorrhage ...	11					2	9	1	4	3	1		2		
Old Age	20						20	2	3	2	8		3	2	
Nervous Diseases ..	28	8	8		2	4	6		13	1	6		6	2	
Kidney Diseases ...	5	1				3	1			2	1		2		
All other causes ...	17	5	3		1	6	2	1	5	4	2	1	3	1	
All causes ..	367	132	57	11	18	89	60	20	119	43	87	13	63	22	4

NOTES.—(*a*) In this Table all deaths of "Resident" occurring in public institutions, whether within or without the district, are to be *included* with the other deaths in the columns for the several age groups (columns 2-8). They are also, in columns 9-15, to be *included* among the deaths in their respective "Localities" according to the previous addresses of the deceased as given by the Registrars. Deaths of "Non-residents" occurring in public institutions in the district are in like manner to be *excluded* from columns 2-8 and 9-15 of this Table.

(*b*) *See* notes on Table I. as to the meaning of "Residents" and "Non-residents," and as to the "Public Institutions" to be taken into account for the purposes of these Tables. The "Localities" should be the same as those in Tables II. and III.

(*c*) All deaths occurring in public institutions situated within the district, whether of "Residents" or of "Non-residents," are, in addition to being dealt with as in note (*a*), to be entered in the last column of this Table. The total number in this column should equal the figures for the year in column 9, Table I.

(*d*) The total deaths in the several "Localities" in columns 9-15 of this Table should equal those for the year in the same localities in Table II., sub-columns c. The total deaths at all ages in column 2 of this Table should equal the gross total of columns 9-15, and the figures for the year in column 12 of Table I.

(*e*) Under the heading of "Diarrhœa" are to be included deaths certified as from diarrhœa, alone or in combination with some other cause of ill-defined nature; and also deaths certified as from

Epidemic enteritis;
Zymotic enteritis;
Epidemic diarrhœa. Summer diarrhœa;
Dysentery and dysenteric diarrhœa;
Choleraic diarrhœa, cholera, cholera nostras
(in the absence of Asiatic cholera).

Under the heading of "Enteritis" are to be included those certified as from Gastroenteritis, Muco-enteritis, and Gastric catarrah, unless from information obtained by enquiry from the certifying practitioner or otherwise, the Medical Officer of Health should have reason for including such deaths, especially those of infants, under the specific term "Diarrhœa." Deaths from diarrhœa secondary to some other well-defined disease should be included under the latter.

Under the headings of "Cancer" and "Puerperal fever" should be included all registered deaths from causes comprised within these general terms.

In recording the facts under the various headings of Tables I., II., III. and IV., attention has been given to the notes on the Tables.

ROBERT S. TROTTER,

Medical Officer of Health.

12th January, 1905.

CASES OF INFECTIOUS DISEASE

B. Notified during the Quarters ending March, June, September and December, 1904.

NOTIFIABLE DISEASE. (Table III.)	Total Cases Notified in each Locality.																								Total.	At Ages—Years.												Total.
	Barrington.			Bedlington.			Cambois.			Choppington.			Netherton.			Sleekburn.			E. & W. Sleekburn.							All Ages.			Under 1.			1 and under 5.			5 and under 15.			15 and under 25.			25 and under 65.			65 and upwards.			
	Jan.	Feb.	Mar.	Jan.	Feb	Mar.	Jan.	Feb.	Mar.	Jan.	Feb.	Mar.	Jan.	Feb.	Mar.	Jan.	Feb.	Mar.	Jan.	Feb.	Mar.					Jan.	Feb.	Mar.	Jan.	Feb.	Mar.	Jan.	Feb.	Mar.	Jan.	Feb.	Mar.	Jan.	Feb.	Mar.	Jan.	Feb.	Mar.	Jan.	Feb.	Mar.	
Smallpox					1	12							10			1									24	1	11	12						1			4	5		1	2	1	6	4				24
Cholera																																																
Diphtheria									1																1	1									1													1
Membranous Croup																																															
Erysipelas	1				2	2	2		2		1	1					1	1							13	4	4	5									1			3	3	4		1	1			13
Scarlet Fever ..				2	2	3					1						2	3		1					15	3	5	7		1		2	2	4	1	2	3											15
Typhus Fever ...																																															
Enteric Fever ...									1			2									1				4	1		3								2			1		1							4
Relapsing Fever ..																																															
Continued Fever ...																									1	1																						1
Puerperal Fever ...																																															
Plague																																															
Totals ...	1				2	5	2		3		2	1					2	3		1	1				57	10	20	27		1		2	2	5	2	6	10	1	1	2	5	9	9		1	1			57

	Total Cases Notified in each Locality.																								Total.	At Ages—Years.												Total.
	Barrington.			Bedlington.			Cambois.			Choppington.			Netherton.			Sleekburn.			E. & W. Sleekburn.							All Ages.			Under 1.			1 and under 5.			5 and under 15.			15 and under 25.			25 and under 65.			65 and upwards.			
	April	May	June	April	May	June	April	May	June	April	May	June	April	May	June	April	May	June	April	May	June					April	May	June	April	May	June	April	May	June	April	May	June	April	May	June	April	May	June	April	May	June	
Smallpox				3	1						1														5	4	1					1			2			1			1						5
Cholera																																															
Diphtheria																									1	1																						1
Membranous Croup																																															
Erysipelas				1						1															2	2									1						1						2
Scarlet Fever ...			1	1	3	2		3		4	1							2							17	5	9	3	1			1	4	3	3	5											17
Typhus Fever ...																																															
Enteric Fever ...				1														1							2	2											1			1							2
Relapsing Fever ...																																															
Continued Fever ...																																															
Puerperal Fever ...															1										1	1											1										
Plague																																															
Totals ...			1	6	4	2		3		6	1		1					1	2						27	14	10	3	1			1	5	3	5	5		4			3							27

	Total Cases Notified in each Locality.																								Total.	At Ages—Years.												Total.
	Barrington.			Bedlington.			Cambois.			Choppington.			Netherton.			Sleekburn.			E. & W. Sleekburn.							All Ages.			Under 1.			1 and under 5.			5 and under 15.			15 and under 25.			25 and under 65.			65 and upwards.			
	July	Aug.	Sept.	July	Aug.	Sept.	July	Aug.	Sept.	July	Aug.	Sept.	July	Aug.	Sept.	July	Aug.	Sept.	July	Aug.	Sept.					July	Aug.	Sept.	July	Aug.	Sept.	July	Aug.	Sept.	July	Aug.	Sept.	July	Aug.	Sept.	July	Aug.	Sept.	July	Aug.	Sept.	
Smallpox																	1								1		1														1						1
Cholera																																															
Diphtheria																					1				1	1																						1
Membranous Croup																																															
Erysipelas									1																2	1	1		1																		2
Scarlet Fever ...							3		1	1	2	5													12	3	2	7				1	2	3	1	5										12
Typhus Fever ...																																															
Enteric Fever ...												1													3		2	1						1			1	1									3
Relapsing Fever ...																																															
Continued Fever ...																									1	1					1																1
Puerperal Fever ...																																															
Plague																																															
Totals ...							3		3	2	2	2	1	1			1				1				20	6	6	8	1			1	1	2	4	2	5		1	1		2					20

	Total Cases Notified in each Locality.																								Total.	At Ages—Years.												Total.
	Barrington.			Bedlington.			Cambois.			Choppington.			Netherton.			Sleekburn.			E. & W. Sleekburn.							All Ages.			Under 1.			1 and under 5.			5 and under 15.			15 and under 25.			25 and under 65.			65 and upwards.			
	Oct.	Nov.	Dec.	Oct.	Nov.	Dec.	Oct.	Nov.	Dec.	Oct.	Nov.	Dec.	Oct.	Nov.	Dec.	Oct.	Nov.	Dec.	Oct.	Nov.	Dec.					Oct.	Nov.	Dec.	Oct.	Nov.	Dec.	Oct.	Nov.	Dec.	Oct.	Nov.	Dec.	Oct.	Nov.	Dec.	Oct.	Nov.	Dec.	Oct.	Nov.	Dec.	
Smallpox																																																
Cholera																																																
Diphtheria													1												1	1																						1
Membranous Croup																																																
Erysipelas																									2	2											1											
Scarlet Fever ...	4	5	4	3		3	12	9	5	8	2	5					2	1	1		1				65	29	18	18			1	13	3	4	16	15	11			2								65
Typhus Fever ...																																															
Enteric Fever ...	2			1			4			2	3							1							13	9	3	1				2		3			2			4	1	1						13
Relapsing Fever ...																																															
Continued Fever ...																																															
Puerperal Fever ...																																															
Plague																																															
Totals ...	6	5	4	4		3	17	9	5	12	5	5					2	1	2		1				81	41	21	19			1	13	5	4	21	15	11	2		2	5	1	1				81

CAUSES OF, AND AGES AT, DEATH during the 6 Months ending at 30th June, 1904.

CAUSES OF DEATH. (TABLE IV.) [See Notes (*a*) and (*b*).]

Month ending 31st January.

CAUSES OF DEATH.	Deaths in whole District at subjoined Ages.							Deaths in Localities (at all Ages).						
	All Ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Barrington.	Bedlington.	Cambois.	Choppington.	Netherton.	Sleekburn.	E. & W. Sleekburn.
Smallpox														
Measles	1	1						1						
Scarlet Fever														
Whooping-Cough	1	1							1					
Diphtheria and Membranous Croup	1			1							1			
Kidney Diseases														
Fever: Typhus														
Fever: Enteric														
Fever: Other continued														
Epidemic Influenza														
Cholera														
Plague														
Diarrhœa														
Enteritis	3	3						1	1		1			
Puerperal Fever														
Erysipelas														
Other Septic Diseases														
Phthisis	3			1	1	1			2		1			
Other Tubercular Diseases														
Cancer, Malignant Disease														
Bronchitis	6	6						1	4			1		
Pneumonia	3	2	1								3			
Pleurisy														
Other Diseases of Respiratory Organs	1	1										1		
Alcoholism / Cirrhosis of Liver	1					1							1	
Venereal Diseases														
Premature Birth														
Diseases and Accidents of Parturition														
Heart diseases	7	2			2	2	2		4	1			1	1
Accidents														
Suicides														
Infantile Atrophy	1	1											1	
Cerebral Hœmorrhage	2					1	1		2					
Old Age	1						1			1				
All other causes	1					1			1					
Nervous Diseases	1						1		1					
All causes	33	17	1	2	2	6	5	3	16	2	6	2	3	1

Month ending 29th February.

CAUSES OF DEATH.	Deaths in whole District at subjoined Ages.							Deaths in Localities (at all Ages).						
	All Ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Barrington.	Bedlington.	Cambois.	Choppington.	Netherton.	Sleekburn.	E. & W. Sleekburn.
Smallpox														
Measles	1	1							1					
Scarlet Fever														
Whooping-Cough	3	2							2					
Diphtheria and Membranous Croup														
Kidney Diseases	1						1			1				
Fever: Typhus														
Fever: Enteric														
Fever: Other continued														
Epidemic Influenza	1					1			1					
Cholera														
Plague														
Diarrhœa														
Enteritis	2	1	1						1				1	
Puerperal Fever														
Erysipelas														
Other Septic Diseases	1					1							1	
Phthisis														
Other Tubercular Diseases	4		1	2		1		1	1		1	1		
Cancer, Malignant Disease														
Bronchitis														
Pneumonia	1		1								1			
Pleurisy														
Other Diseases of Respiratory Organs														
Alcoholism / Cirrhosis of Liver														
Venereal Diseases														
Premature Birth														
Diseases and Accidents of Parturition														
Heart diseases	1					1			1					
Accidents	2					1	1		1		1			
Suicides														
Infantile Atrophy	3	3							1		1		1	
Cerebral Hœmorrhage	2						2			1			1	
Old Age	6						6	1	2		1			2
All other causes	2		1		1				2					
Nervous Diseases	3		1			1	1		1					2
All causes	32	7	5	2	1	6	11	2	14	2	5	1	4	4

Month ending 31st March.

CAUSES OF DEATH.	Deaths in whole District at subjoined Ages.							Deaths in Localities (at all Ages).						
	All Ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Barrington.	Bedlington.	Cambois.	Choppington.	Netherton.	Sleekburn.	E. & W. Sleekburn.
Smallpox	2					2			*2					
Measles														
Scarlet Fever														
Whooping-Cough	1		1					1						
Diphtheria and Membranous Croup														
Kidney Diseases														
Fever: Typhus														
Fever: Enteric														
Fever: Other continued														
Epidemic Influenza														
Cholera														
Plague														
Diarrhœa														
Enteritis	3	1		1			1	1			2			
Puerperal Fever														
Erysipelas														
Other Septic Diseases														
Phthisis	3				1	2			1	1	1			
Other Tubercular Diseases	1	1									1			
Cancer, Malignant Disease	2					1	1		1		1			
Bronchitis	3	2				1				1	1			1
Pneumonia	1		1						1					
Pleurisy														
Other Diseases of Respiratory Organs														
Alcoholism / Cirrhosis of Liver														
Venereal Diseases														
Premature Birth	2	2									1			1
Diseases and Accidents of Parturition														
Heart diseases	2					1	1		1		1			
Accidents	1				1				1					
Suicides														
Infantile Atrophy	3	2	1								2		1	
Cerebral Hœmorrhage	2						2	1	1					
Old Age	1						1				1			
All other causes	3	1				1	1		1		1			1
Nervous Diseases	2	2								1			1	
All causes	32	11	3	1	2	8	7	3	9	3	12	0	2	3

Month ending 30th April.

CAUSES OF DEATH.	Deaths in whole District at subjoined Ages.							Deaths in Localities (at all Ages).						
	All Ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Barrington.	Bedlington.	Cambois.	Choppington.	Netherton.	Sleekburn.	E. & W. Sleekburn.
Smallpox	1					1			*1					
Measles														
Scarlet Fever	1	1									1			
Whooping-Cough	3	2	1								1	1	1	
Diphtheria and Membranous Croup														
Kidney Diseases	1					1					1			
Fever: Typhus														
Fever: Enteric														
Fever: Other continued														
Epidemic Influenza														
Cholera														
Plague														
Diarrhœa														
Enteritis	1	1											1	
Puerperal Fever														
Erysipelas														
Other Septic Diseases														
Phthisis	3					3			1	2				
Other Tubercular Diseases	2	1	1								1		1	
Cancer, Malignant Disease	2						2		2					
Bronchitis	2	2							1		1			
Pneumonia	6	2	1	1	1	1			1	1	2		2	
Pleurisy														
Other Diseases of Respiratory Organs														
Alcoholism / Cirrhosis of Liver														
Venereal Diseases														
Premature Birth	2	2								1				1
Diseases and Accidents of Parturition	2					2			1		1			
Heart diseases	3					2	1	2				1		
Accidents	2				1	1			1				1	
Suicides														
Infantile Atrophy	4	4									1		3	
Cerebral Hœmorrhage														
Old Age														
All other causes	2					2		1		1				
Nervous Diseases	4	2	1				1		3		1			
All causes	41	17	4	1	2	13	4	3	11	5	10	2	9	1

Month ending 31st May.

CAUSES OF DEATH.	Deaths in whole District at subjoined Ages.							Deaths in Localities (at all Ages).						
	All Ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Barrington.	Bedlington.	Cambois.	Choppington.	Netherton.	Sleekburn.	E. & W. Sleekburn.
Smallpox	1		1						*1					
Measles														
Scarlet Fever														
Whooping-Cough	4	2	2						1		3			
Diphtheria and Membranous Croup														
Kidney Diseases														
Fever: Typhus														
Fever: Enteric														
Fever: Other continued														
Epidemic Influenza														
Cholera														
Plague														
Diarrhœa														
Enteritis														
Puerperal Fever														
Erysipelas														
Other Septic Diseases														
Phthisis	1				1				1					
Other Tubercular Diseases	1		1										1	
Cancer, Malignant Disease	2					2			1			1		
Bronchitis	4		2			1	1		1	1	1			1
Pneumonia														
Pleurisy	1					1					1			
Other Diseases of Respiratory Organs														
Alcoholism / Cirrhosis of Liver	1					1							1	
Venereal Diseases														
Premature Birth	3	3								1			1	1
Diseases and Accidents of Parturition														
Heart diseases	3			1		2				1	1		1	
Accidents														
Suicides	1					1							1	
Infantile Atrophy	3	3							1	1	1			
Cerebral Hœmorrhage	2					1	1			1	1			
Old Age	1						1		1					
All other causes	1	1								1				
Nervous Diseases	2	2									1		1	
All causes	31	11	6	1	1	9	3	0	7	6	9	1	6	2

Month ending 30th June.

CAUSES OF DEATH.	Deaths in whole District at subjoined Ages.							Deaths in Localities (at all Ages).						
	All Ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Barrington.	Bedlington.	Cambois.	Choppington.	Netherton.	Sleekburn.	E. & W. Sleekburn.
Smallpox														
Measles														
Scarlet Fever														
Whooping-Cough	3		3						1		2			
Diphtheria and Membranous Croup														
Kidney Diseases														
Fever: Typhus														
Fever: Enteric														
Fever: Other continued														
Epidemic Influenza														
Cholera														
Plague														
Diarrhœa														
Enteritis	1	1							1					
Puerperal Fever														
Erysipelas														
Other Septic Diseases														
Phthisis	2				1	1			1		1			
Other Tubercular Diseases														
Cancer, Malignant Disease	2					2			1				1	
Bronchitis	1		1								1			
Pneumonia	2			1	1			1			1			
Pleurisy														
Other Diseases of Respiratory Organs														
Alcoholism / Cirrhosis of Liver														
Venereal Diseases														
Premature Birth	4	4									1		3	
Diseases and Accidents of Parturition														
Heart diseases	6		1			4	1		1		2		2	1
Accidents	1					1			1					
Suicides														
Infantile Atrophy	1	1												1
Cerebral Hœmorrhage	1						1						1	
Old Age	2						2				1		1	
All other causes	2		1			1							2	
Nervous Diseases	3		2				1		2		1			
All causes	31	6	8	1	2	9	5	1	8	0	10	0	10	2

TOTALS for 6 Months.

CAUSES OF DEATH.	Deaths in whole District at subjoined Ages.							Deaths in Localities (at all Ages).						
	All Ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Barrington.	Bedlington.	Cambois.	Choppington.	Netherton.	Sleekburn.	E. & W. Sleekburn.
Smallpox	4		1			3			*4					
Measles	2	2						1	1					
Scarlet Fever	1	1									1			
Whooping-Cough	14	7	7					1	5		6	1	1	
Diphtheria and Membranous Croup	1			1							1			
Kidney Diseases	2					1	1			1	1			
Fever: Typhus														
Fever: Enteric														
Fever: Other continued														
Epidemic Influenza	1					1			1					
Cholera														
Plague														
Diarrhœa														
Enteritis	10	7	1	1			1	2	3		3		2	
Puerperal Fever														
Erysipelas														
Other Septic Diseases	1					1							1	
Phthisis	12			1	4	7			6	3	3			
Other Tubercular Diseases	8	2	3	2		1		1	1		3	1	2	
Cancer, Malignant Disease	8					5	3		5		1	1	1	
Bronchitis	16	10	3			2	1	1	6	2	4	1		2
Pneumonia	13	4	4	2	2	1		1	2	1	7		2	
Pleurisy	1					1					1			
Other Diseases of Respiratory Organs	1	1										1		
Alcoholism / Cirrhosis of Liver	2					2							2	
Venereal Diseases														
Premature Birth	11	11								2	2		4	3
Diseases and Accidents of Parturition	2					2			1		1			
Heart diseases	22	2	1	1	1	12	5	2	7	2	4	1	4	2
Accidents	6				2	3	1		4		1		1	
Suicides	1					1							1	
Infantile Atrophy	15	14	1						2	1	5		6	1
Cerebral Hœmorrhage	9					2	7	1	3	2	1		2	
Old Age	11						11	1	3	1	3		1	2
All other causes	11	2	2		1	5	1	1	4	2	1		2	1
Nervous Diseases	15	6	4			1	4		7	1	3		2	2
All causes	200	69	27	8	10	51	35	12	65	18	52	6	34	13

	Month ending 31st January.	Month ending 29th February.	Month ending 31st March.	Month ending 30th April.	Month ending 31st May.	Month ending 30th June.
Total Deaths	17 M 16 F	17 M 15 F	17 M 15 F	23 M 18 F	19 M 12 F	17 M 14 F
Births	39 M 39 F 0 Illeg.	28 M 21 F 1 M 2 F Illeg.	28 M 30 F 1 M 1 F Illeg.	31 M 26 F 1 F Illeg.	39 M 26 F 1 M 1 F Illeg.	27 M 28 F 3M 1 F Illeg.

* Indicates Deaths in Public Institutions.

CAUSES OF, AND AGES AT, DEATH during the 6 Months ending at 31st December, 1904.

| CAUSES OF DEATH. (Table IV.) [See Notes (*a*) and (*b*).] | Month ending 31st July. | | | | | | | | | | | | Month ending 31st August. | | | | | | | | | | | | Month ending 30th September. | | | | | | | | | | | | Month ending 31st October. | | | | | | | | | | | | Month ending 30th November. | | | | | | | | | | | | Month ending 31st December. | | | | | | | | | | | | TOTALS for 6 Months. | | | | | | | | | | | |
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